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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/687,345	10/14/2003	Duane Ley	SYTS-002	7855
7590	11/29/2004			
Michael S. Neustel Suite No. 4 2534 South University Drive Fargo, ND 58103				
EXAMINER MACARTHUR, VICTOR L				
ART UNIT		PAPER NUMBER		
3679				

DATE MAILED: 11/29/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/687,345

Applicant(s)

LEY, DUANE

Examiner

Victor MacArthur

Art Unit

3679

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 August 2004.
- 2a) ☒ This action is FINAL. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 16 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 16 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Restriction/Election

As discussed in the interview of 8/20/2004, the applicant's only invention is in the product made since the process is obvious. As such the product claims presented by the applicant in the amendment filed on 8/30/2004 do not constitute a shift of invention and have been permitted by the examiner in accordance with MPEP §820.

Claim Objections

Claim 16 is objected to because of the following informalities:

- Lines 21-22 of claim 16 appear to be a word for word repeat of lines 19-20 and should be deleted from the claim.

Appropriate correction is required. For purposes of examining the instant invention, the examiner has assumed these corrections have been made.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 16 is rejected under 35 U.S.C. 103(a) as being unpatentable over Grisley (U.S. Patent 5,123,463) in view of Lucci (U.S. Patent 3,674,068) and Nemecek (U.S. Patent 3,966,339).

Claim 16. Grisley discloses (fig.2) a mortise and tenon joint system, comprising: a first board member (bottom 9) comprised of wood (col.6, l.8) having a first end (top end of bottom 9) supporting 16) and a tenon (16) continuously extending from the first end, wherein the tenon has an oblong cross sectional shape with opposing rounded end portions (left and right rounded ends of 16); a second board member (top 9) having a second end (bottom end of top 9 facing bottom 9) and a mortise (8) within the second end for snugly receiving the tenon, wherein the mortise has an oblong cross sectional shape with opposing rounded end portions (left and right end portions of 8) corresponding to the tenon, and wherein the mortise has a cross sectional size larger than the tenon (in that the mortise receives the tenon). Grisley does not disclose that the tenon has a plurality of channels. Lucci teaches (col.4, ll.3-24) that transverse channels may be employed in a tenon to improve the bonding between mortise and tenon by presenting space for adhesives. Lucci does not disclose the shape of the channels of the transverse channel embodiment. Nemecek teaches (figs.1 and 2) a tenon (1) with transverse channels (bottom six channels in 1) shaped such that they extend transversely between a plurality of flat outer wall portions (3, 4, 8) within the tenon fully capable of receiving adhesive, wherein the plurality of channels are comprised of: a base channel (sixth channel up from the bottom of 1) adjacent a first end (bottom end of 23); an end channel (bottom channel in 1) within a distal end (bottom end of 1) of the tenon; and at least one middle channel (second channel up from the bottom of 1 and third channel up from the bottom of 1) positioned between the base channel and the end channel, wherein the at least one middle channel is located a distance greater from the base channel than from the end channel; wherein the plurality of channels are parallel to one another; wherein each of the plurality of channels extend within an outer perimeter of the tenon; wherein

the at least one middle channel is comprised of a first channel (second channel up from the bottom of 1) and a second channel (third channel up from the bottom of 1); wherein a distance between the first channel and the base channel is greater than a distance between the second channel and the end channel; wherein the base channel is comprised of a tapered structure (9); a plurality of lands (3, 4, 6) extending between each of the plurality of channels within the tenon, wherein each of the plurality of lands has a substantially flat structure (flat structure of 3, flat structure of 4, 8) and are substantially transverse with respect to the channels; and wherein the plurality of lands extends between the plurality of channels parallel to one another across each side of the tenon. It has generally been recognized that a change in the shape of a prior art device is a design consideration within the skill of the art. In re Dailey, 357 F.2d 669, 149 USPQ 47 (CCPA 1966). Therefore, it would have been obvious to one with ordinary skill in the art at the time the invention was made to modify the Grisley tenon to have transverse channels for the purpose of improving bonding by providing space for adhesive, as taught by Grisley, and to shape the channels as taught by Nemecek, since such practice is a design consideration in the art.

Response to Arguments

Applicant's arguments with respect to the claims have been considered but are moot in view of the new grounds of rejection.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Referring to mortise and tenon joints:

Hourd U.S. Patent 991,722

Peterson U.S. Patent 4,479,523

Saunders U.S. Patent 4,943,067

DeJong U.S. Patent 5,037,234

Lubbe U.S. Patent 5,494,089

Applicant's amendment (i.e. the newly added limitation "a plurality of lands extending... each side of said tenon" (lines 26-30 of claim 16) necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Victor MacArthur whose telephone number is (703) 305-5701.

The examiner can normally be reached on 8:30am - 5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Daniel P. Stodola can be reached on (703) 308-2686. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-1113.

VLM

VLM

November 23, 2004

Daniel P Stodola

DANIEL P. STODOLA
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 3600

C. APPLICANT'S COMMENTS

Claims 1 – 15 are cancelled in this Application, and Claim 16 is added. No new matter is added by way of these amendments, and the amendments are supported throughout the Specification and the drawings. Claim 16 is respectfully requested to be in condition for allowance.

Interview
Summary
OK.
vjm
11/23/04

The interview with the Examiner on August 20, 2004 was very beneficial. The Applicant agrees to the Summary as prepared by the Examiner in the Interview Summary as to the substance of the interview pursuant to MPEP 713.04.

D. CONCLUSION

In light of the foregoing amendments and remarks, early reconsideration and allowance of this application are most courteously solicited. Should the Examiner consider necessary or desirable any formal changes anywhere in the specification, claims and/or drawing, then it is respectfully asked that such changes be made by Examiner's Amendment, if the Examiner feels this would facilitate passage of the case to issuance. Alternatively should the Examiner feel that a personal discussion might be helpful in advancing this case to allowance, they are invited to telephone the undersigned.

Respectfully submitted,



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August 27, 2004

Date

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